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10/776,531	02/12/2004	Shrjie Tzeng	58268.00361	4147
32294 7590 03/12/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182				
EXAMINER				
KRISHNAN, VIVEK V				
ART UNIT		PAPER NUMBER		
2145				
MAIL DATE		DELIVERY MODE		
03/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/776,531

**Applicant(s)**

TZENG, SHRJIE

**Examiner**

VIVEK KRISHNAN

**Art Unit**

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to the Amendment/Arguments filed on December 12, 2007.

Claims 1-15 are pending.

### ***Response to Arguments***

1. Applicant's arguments and amendments, filed December 12, 2007, with respect to Claim Objections regarding informalities have been fully considered and are persuasive. The objections of Claims 7-10 and 12-15 have been withdrawn.
2. Applicant's arguments and amendments, filed December 12, 2007, with respect to Claim Rejections under 35 U.S.C. 112 have been fully considered and are persuasive. The rejection of Claim 1 has been withdrawn.
3. Applicant's arguments, filed December 12, 2007, with respect to Claim Rejections under 35 U.S.C. 102 have been fully considered but they are not persuasive.
  - a. There is no division in Kalkunte of devices into a first side and a second side, where a network device is on the first side.

Examiner asserts that Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Furthermore, Kalkunte's disclosure includes a system of devices with a first side including the switch fabric and ingress network switches (Kalkunte; column 3 lines 1-20 and

Figure 1) and a second side including the egress network switches and the destination devices (Kalkunte; column 3 lines 1-20 and Figure 1).

b. There is no determination made in Kalkunte whether the destination address corresponds to one of the network devices. Rather, the determination is made whether the destination address belongs to a trunk group of trunked ports.

Examiner asserts that a trunk group of ports inherently belongs to a network device. Therefore, in making a determination as to whether a destination address corresponds to a trunk group of ports, the determination as to whether the destination address corresponds to one of the network devices is made.

c. Kalkunte does not teach or suggest that a determination is made whether the frame is for a member of a specific trunk group and a destination device identifier.

Examiner asserts that as Applicant admits, the packet is forwarded to a destination port based on both being a member of a specific trunk group (...a particular trunked port of the trunk group is determined in Kalkunte and the incoming data packet is forwarded thereto, see page 11 of Applicant's Remarks filed December 12, 2007 and column 3 lines 1-20 of Kalkunte), the destination address, which is used to determine the trunk group the packet corresponds to (when the destination address does belong to the trunk group..., see page 11 of Applicant's Remarks filed December 12, 2007 and column 3 lines 1-20 of Kalkunte), and the destination value, which is used to determine the particular

trunked port of the trunk group the packet corresponds to (...the particular trunked port of the trunk group in Kalkunte is determined by calculating a hash value based on the source address and the destination value..., see page 11 of Applicant's Remarks filed December 12, 2007 and column 3 lines 1-20 of Kalkunte).

4. Applicant's arguments, filed December 12, 2007, with respect to Claim Rejections under 35 U.S.C. 103 have been fully considered but they are not persuasive.

d. Varanasi does not cure the deficiencies of Kalkunte.

Examiner asserts that in view of the aforementioned argument that Kalkunte discloses each and every limitation of Claims 1, 6, and 11, Applicant's argument that Varanasi does not disclose the limitations in the independent claims is moot.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-6, 8-11, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0027908 A1 to Kalkunte et al. (hereinafter "Kalkunte").

7. As to Claims 1, 6, and 11, Kalkunte discloses a method and network device (referenced hereinafter as the method) of handling frames in a network device, said method comprising:

receiving a frame at a network device of an assembly of network devices, with the assembly of devices divided into a first side and a second side and the network device being on the first side (Kalkunte; column 2 lines 65-67, column 3 lines 1-20, and Figure 1, discloses receiving a frame at a network switch fabric, with a system of devices divided into a first side including the switch fabric and ingress network switches and a second side including the egress network switches and the destination devices);

examining the received frame to determine whether the frame is destined for a member of a specific trunk group (Kalkunte; column 2 lines 65-67, column 3 lines 1-20, and Figure 1, discloses examining the received frame to determine whether the frame is belongs to a specific trunk group);

determining whether a destination device identifier for the frame corresponds to one of the network devices on the second side (Kalkunte; column 2 lines 65-67, column 3 lines 1-20, and Figure 1, discloses examining the destination address of the frame to determine both the destination on the second side that the frame belongs to and the destination device associated with the trunk group on the second side that the frame belongs to); and

forwarding the frame to a destination port based on being a member of the specific trunk group and the destination device identifier (Kalkunte; column 2 lines 65-

67, column 3 lines 1-20, and Figure 1, discloses forwarding the frame to a destination port based on being a member of the specific trunk group and the destination address).

8. As to Claims 3, 8, and 13, Kalkunte discloses each and every limitation of claims 1, 6, and 11. Kalkunte further discloses wherein the examining of the received frame comprises performing a lookup in a trunk group table (Kalkunte; column 3 lines 20-40, discloses examining the frame by performing a lookup in a trunk group table).

9. As to claims 4, 9, and 14, Kalkunte discloses each and every limitation of claims 1, 6, and 11. Kalkunte further discloses wherein the determining comprises examining the destination device identifier contained in a header of the frame (Kalkunte; column 3 lines 20-40, discloses examining the destination address in the header of the frame).

10. As to claims 5, 10, and 15, Kalkunte discloses each and every limitation of claims 1, 6, and 11. Kalkunte further discloses wherein the forwarding of the frame comprises forwarding the frame over an interconnected Gigabit port of the network device when the destination port is the member of the specific trunk group and the destination device identifier indicates one of the network devices on the second side (Kalkunte; Figure 1, discloses forwarding the frame over an interconnected Gigabit port of the network switch fabric).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2, 7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalkunte, as applied to claims 1, 6, and 11, and in further view of U.S. Patent Application Publication No. 2005/0105904 to Varanasi et al. (hereinafter "Varanasi").

13. As to Claims 2, 7, and 12, Kalkunte discloses each and every limitation of claims 1, 6, and 11. Kalkunte does not explicitly disclose, but Varanasi discloses wherein the examining of the received frame comprises examining the received frame to determine whether the frame is destined for the member of the specific trunking group of ports providing connections over a high speed data port interface (Varanasi; page 6 paragraphs 55-58, discloses examining the received frame to determine, based on the weighting considerations, whether the frame is destined for ports providing connections over higher bandwidth port interfaces).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify examining the received frame to determine whether it is destined for a member of a specific trunk group, as disclosed by Kalkunte, to include further discrimination on the speed of the ports associated with trunk group, as disclosed by Varanasi, in order to minimize congestion of any particular port (Varanasi; page 6 paragraphs 55-58).



***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIVEK KRISHNAN whose telephone number is (571) 270-5009. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VK

/Jason D Cardone/  
Supervisory Patent Examiner, Art Unit 2145